

## **ENSC4535 Chemical Treatment Processes**

### **Course Description:**

This course introduces the principles and applications of various chemical and physiochemical processes applicable for treatment and control of air, water and soil pollution. It covers both traditional and emerging technologies. It also examines the applicability and limitation of such processes with reference to the treatment of toxic and hazardous chemical wastes.

### **Pre-requisite:**

ENSC2515 or permission of the instructor

### **Main Course Outline (for reference only):**

1. A case of dioxin contamination in Hong Kong
2. Useful databases for chemical treatment
3. Chemical waste analysis
4. Chemical treatment in Hong Kong
5. Soil remediation technologies
6. Advanced oxidation processes
7. Nanotechnology and photocatalysis
8. Management of Fukushima wastewater